

**TENNESSEE DEPARTMENT OF REVENUE  
LETTER RULING # 05-06**

**WARNING**

**Letter rulings are binding on the Department only with respect to the individual taxpayer being addressed in the ruling. This presentation of the ruling in a redacted form is informational only. Rulings are made in response to particular facts presented and are not intended necessarily as statements of Department policy.**

**SUBJECT**

Application of sales and use taxes to medical equipment purchased by [HOSPITALS].

**SCOPE**

This letter ruling is an interpretation and application of the tax law as it relates to a specific set of existing facts furnished to the department by the taxpayer. The rulings herein are binding upon the department and are applicable only to the individual taxpayer being addressed.

This letter ruling may be revoked or modified by the commissioner at any time.

Such revocation or modification shall be effective retroactively unless the following conditions are met, in which case the revocation shall be prospective only:

- (A) The taxpayer must not have misstated or omitted material facts involved in the transaction;
- (B) Facts that develop later must not be materially different from the facts upon which the ruling was based;
- (C) The applicable law must not have been changed or amended;
- (D) The ruling must have been issued originally with respect to a prospective or proposed transaction; and
- (E) The taxpayer directly involved must have acted in good faith in relying upon the ruling and a retroactive revocation of the ruling must inure to his detriment.

**FACTS**

[THE TAXPAYERS] are [CORPORATIONS] that operate health care facilities. The Taxpayers contract and pay for (i) the acquisition and installation of and (ii) the repair and maintenance of items of durable medical imaging equipment (the "Imaging Equipment"). The equipment falls under the following categories:

"MRI" (Magnetic Resonance Imaging equipment);  
"CT" (Computerized Tomography equipment);  
"XV" (X-Ray Vascular equipment);  
"XF" (Radiographic and Fluoroscopic X-Ray equipment); and  
"NM" (Nuclear Medicine equipment).

### Magnetic Resonance Imaging Equipment

Magnetic resonance imaging ("MRI") is a way of capturing images of body structures without the use of x-rays. A typical MRI scanner is configured as a massive, heavy cube with a cylindrical opening or hole through the middle. The patient lies on a table that slides into the opening. The scanner is connected to special power sources, computers, and a control panel by conduits embedded in the walls and floors.

An MRI is a very large and complex piece of medical equipment that contains a number of integrated component parts. These parts typically include a superconducting magnet with a weight of several tons or more, a multi-component radio frequency system, a multi-component computer system, a multi-component operating console, a viewing station, a patient table, a camera, and numerous other accessories.

While the sheer size alone of an MRI generally requires that it be installed in several contiguous rooms, other characteristics of the MRI also require special construction methods and structural considerations. The weight of the magnet and other components, the strong magnetic field, the use of radio frequency signals and the use of cryogenic liquids for cooling the magnet all require that the building in which the MRI will be installed meet special structural, electrical, and mechanical criteria.

A magnetic dome is required around the magnet in order to (i) protect the magnet from its environment, and (ii) protect the environment from the strong magnetic field. To maintain the proper functioning of the MRI magnet, the magnet must be filled and cooled prior to start up and once operating must be kept in that state through the use of helium and nitrogen gases that surround the magnet. Special sound insulation is required where the transfer line passes through the wall. For safety reasons, helium that evaporates must be vented to the outside of the building.

As a result of the dimensions (e.g., 90" x 96" x 82") of the magnet, the magnet may have to be delivered prior to completion of the walls to the examination room. In order to remove the magnet from the typical MRI center, one would have to remove (i) the walls between the MRI center and the outside or (ii) the ceiling and magnetic dome over the magnet, steel plates, structural members, components of the floor above the MRI center and, finally, the roof of the MRI center building.

### Computerized Tomography Equipment

Computerized tomography (CT) units are imaging devices that use multiple radiographic x-ray images to create cross-sectional images of body structures. The site design and installation of the typical CT scanner are similar to the installation of the MRI equipment.

As with the MRI equipment, a multi-room configuration of the CT site is necessary to accommodate the size of the CT equipment and to meet radiation safety and shielding requirements. Extensive cabling and wiring running beneath the floor and through the walls links the pieces of equipment in contiguous rooms. The "gantry," the component that contains the x-ray device, weighs 2,403 pounds, while the patient table weighs 650 pounds. The CT scanners require high voltage connectors and power supplies in excess of those available through regular wall sockets. The CT scanners are linked to the power supply room by means of hard wiring. The power supply equipment is hard-wired into the building.

### X-Ray Vascular Equipment

An example of an X-Ray Vascular Room is a cardiac catheterization lab ("cath lab"), a room in which certain diagnostic and interventional procedures are performed. Another type of X-Ray Vascular Room is the "specialist lab," which is configured almost identically to the cath lab. Cath and specialist labs incorporate both radiographic and fluoroscopic x-ray imaging devices, either suspended from gantries or contained on large c-arms affixed to the floor. These imaging devices include integral wiring and cabling conduits that connect the equipment to specialized power sources, control panels, and computerized control and monitoring devices.

The typical cath lab installation consists of three contiguous rooms consisting of an examination room and separate rooms for the power supply and the operator. The positioner is mounted to the floor, while two longitudinal stationary rails and a cable rail are mounted to the ceiling. The positioner weighs 2337 pounds, and the patient examination table weighs 1,301 pounds. Extensive cabling and wiring running beneath the floor and through the walls link the pieces of equipment in each contiguous room.

### Radiographic and Fluoroscopic X-Ray Equipment

Radiographic x-ray machines function much like a conventional camera, but use x-rays rather than visible light to expose specialized film.

The x-ray tube may be affixed either to a ceiling-mounted pedestal called a "gantry," which is attached to metal struts bolted to a metal support system in the ceiling, or it may be affixed to a "c-arm" that is bolted to a fixed pivot arm on the floor. Conduits run from the machine to a special power supply and control panel. The rooms housing x-ray units must, by law, include extensive built-in shielding materials to prevent the x-ray radiation from escaping the room. Similar shielding requirements apply to the rooms housing each of the other types of x-ray based imaging technologies described herein.

A fluoroscope consists of an x-ray tube mounted on a gantry or c-arm and, on the opposite side of the patient's body from the x-ray source, a "fluorescent screen," (i.e., a surface that contains phosphors which glow when impinged on by x-rays). Generally, a fluoroscope and the room into which it is integrated are configured in a manner very similar to radiographic x-ray rooms. Frequently the same room, and even the same apparatus, will combine both radiographic and fluoroscopic x-ray capabilities.

A third type of specialized x-ray equipment is the tomograph, which is a radiographic x-ray device mounted on a gantry and capable of swiveling to capture images from different angles. This effectively allows for images of different layers of a body structure.

The radiographic and fluoroscopic equipment are suspended from a ceiling-mounted gantry. The operator's control room is physically separated from the examination room by a wall. The operator observes the patient through a window while she remains shielded from the radiation. The operator's console is connected to the equipment in the examination room by means of wire and cable extending through the floor and walls. The radiographic imaging equipment is mounted on the floor, ceiling or wall, as applicable. The equipment is connected to the operator's console by means of wire and cable extending through the floor and walls. The room must be specially configured to allow the operator to work safely behind a radiation-shielded wall.

### Nuclear Medicine Equipment

This equipment produces images and highlights certain anomalies within the body through the use of low-level radioactive isotopes.

The configuration and installation of Nuclear Medicine imaging equipment is quite similar to that associated with other the other major types of imaging equipment described herein. The 0.2 Tesla magnet and table weigh 22,486 pounds (*i.e.*, 10 tons). The power system weighs 990 pounds by itself. The equipment is configured in three separate, contiguous rooms. There is the "magnet room" where the patient is scanned, a separate control room for the operator and a third room where the power supply and associated equipment are located. The operator workstations are connected to the imaging system by means of cables and wiring that run beneath the floor. The imaging system and patient table are mounted on a reinforced concrete foundation. As with other types of Imaging Equipment, the NM Imaging Equipment must meet state prescribed radiation safety and shielding requirements.

### Market for Used Medical Imaging Equipment

There appears to be a substantial market for used medical imaging equipment. A simple internet search yields many retailers of used MRI, CT, XV, XF, and NM equipment.<sup>1</sup> The prices for MRI equipment appear to start around \$200,000. The prices for CT equipment were typically higher and appear to be in the \$400,000 range. X-ray equipment seems to be priced around \$50,000, with the price varying by \$10,000 or more depending on the specifications of each individual unit.

## **QUESTION**

Does the medical equipment described in the facts become real property for the purpose of sales and use taxes when it is installed?

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<sup>1</sup> For examples, please see: [www.monarchmedical.com](http://www.monarchmedical.com); <http://activexray.com>; [www.icsmedical.net/equipment](http://www.icsmedical.net/equipment).

## RULING

No. The medical equipment described in the facts remains personal property after installation.

## ANALYSIS

### Application of Sales and Use Tax

Title 67, Chapter 6, of the Tennessee Code, the “Retailers’ Sales Tax Act,” imposes state and local, sales and use taxes on the sale or use of tangible personal property. The manner in which the sales or use tax applies to the sale, installation, and maintenance of high technology medical systems is dependent upon whether the medical equipment becomes real property after installation. If an installed medical system remains tangible personal property after installation, all charges for the sale and installation, as well as any later repair or maintenance charges will be fully taxed.<sup>2</sup>

If the medical equipment becomes real property after it is installed, sales tax does not apply to the transfer and installation of such equipment by the vendor/contractor. The transfer of tangible personal property by a contractor who contracts for the installation of such tangible personal property as an improvement to realty does not constitute a sale. Tenn. Code Ann. §67-6-209(c). In addition, charges for installation of tangible personal property that becomes part of the real estate upon installation are not subject to the tax. Instead, the “contractor’s use tax” imposed by Tenn. Code Ann. § 67-6-209 is applicable to the installer. In that case, the installer is liable for use tax on the “cost” of the medical equipment he has installed. Charges for repair of medical equipment that is part of the real property would not be subject to the sales tax since only repairs of tangible personal property are taxable. The “contractor’s use tax” also applies to materials used in repairing real property.

### The Law of Fixtures in Tennessee

In the most recent sales or use tax case on this subject, *Process Systems Inc. v. Huddleston*, 1996 WL 614526 (Tenn. Ct. App., 1996), the Court of Appeals reviewed the law on fixtures:

In determining whether property affixed to realty is deemed realty or personal property, the controlling factor is the intention and purpose of the installation. *Hubbard v. Hardeman County Bank*, 868 S.W.2d 656, 660 (Tenn.App.1993); *Johnson v. Patterson*, 81 Tenn. 626, 631-32 (1884). Personal property does not become part of the realty to which it is attached " '[i]f it is intended to be removable at the pleasure of the owner.' " *Memphis Hous. Auth. v. Memphis Steam LaundryCleaner, Inc.*, 225 Tenn. 46, 52, 463 S.W.2d 677, 679 (1971) (quoting *Hickman v. Booth*, 131 Tenn. 32, 34, 173 S.W. 438, 438 (1914)). In determining the intent and purpose of the parties, a court should look at both the objective and subjective elements. *See Hubbard*, 868 S.W.2d at 660. Personal property becomes part of the realty, though, if removing it would seriously damage the building to which it is affixed. *Memphis Hous. Auth.*, 225 Tenn.

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<sup>2</sup> From the facts presented, there would be no applicable exemption for these transactions.

at 52, 463 S.W.2d at 679. It is also considered realty if removal would destroy its essential character as personalty. *Green v. Harper*, 700 S.W.2d 565, 567 (Tenn.App.1985). *Id.* at 3.

In *Process Systems Inc. v. Huddleston*, equipment was installed in a building leased by the taxpayer's customer. The taxpayer established the conveyor system was not removable without damaging the building or destroying the essential character of the conveyor system, specifically, that the cost of removal of the structural supports would render their removal and reuse economically infeasible. The Court considered damage to the building or the equipment upon its removal to be controlling, and held the conveyor systems became realty upon installation. *Id.* at 4.

*Magnavox Consumer Electronics v. King*, 707 S.W.2d 504 (Tenn. 1986), involved the purchase of a 500,000-gallon fuel tank placed on a concrete slab on the property of the taxpayer by the contractor/installer. The fuel tank was not actually anchored to the concrete slab upon which it was placed. Instead, four metal rods protruded from the concrete slab to stabilize the huge tank. Nonetheless, the Court held the tank to be real property upon installation so that sales tax did not apply to the sale and installation. The Court determined the "sheer size" of the tank indicated it was not intended to be removed. *Id.* at 507.

In another sales tax case, *Harry J. Whelchel v. King*, 610 S.W.2d 710 (Tenn.1980), the Court held that a large grain bin remained tangible personal property after installation. The Court relied heavily upon the fact the grain bins could be disassembled and hauled away at less expense and in less time than was required to erect them in the first instance, and without "serious injury to the freehold." It was more economical to disassemble, move and reassemble a used grain bin than to buy a new one.<sup>3</sup> The Court distinguished *Whelchel* from *Magnavox* stating that the tank in *Magnavox* was much larger than the grain bin in *Whelchel* and could not be disassembled for easy removal.

#### Application of Law to Taxpayers' Equipment

The case law shows that the determination of whether a piece of equipment becomes real property after installation depends on the following factors: intent, the damage caused by removal, and the relative cost of removal. In *Process Systems*, the Court of Appeals based its ruling on damage to the building or to the equipment, and found that a conveyor belt became real property upon installation. However, in *Whelchel*, the Supreme Court found that grain bins remained personal property based on the fact that it was more economical to disassemble, move and reassemble a used grain bin than to buy a new one. The same would hold true for durable medical equipment. It is more economical to disassemble, move and reassemble it than to buy all new equipment. Unlike in *Process Systems*, the cost of removal of the medical equipment would not make its reuse economically infeasible. As stated in the facts above, there is a significant market for used medical imaging equipment. Depending on the type of equipment, the resale value

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<sup>3</sup> See also: *In re: Hammond*, 38 B.R. 548, 551-552,554 (Bankruptcy 1984) where the Court cited *Whelchel* in determining that a silo remained tangible personal property under the Tennessee UCC. The Court said silos have "substantial resale value."

can range from tens of thousands of dollars to half a million dollars or more. The high monetary value of this equipment shows that its reuse is economically feasible.

In *Process Systems*, *Magnavox*, and *Welchel*, the Courts based their holdings on the objective intent of the Taxpayer. In *Magnavox*, the Court stated that the size of the fuel tank indicated that it was not intended to be removed. In *Welchel*, the Court held that the cost of buying a new grain bin as compared to disassembling, moving and reassembling a used one showed an intent for the grain bins to be treated as removable personal property. Similarly, in the case of the durable medical equipment described here, the objective intent, based on the high cost of the equipment, shows that it is intended to remain removable personal property.

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